

What is Claimed is:

1. A label adapted to receive an indicium having varying spectral emissivity values, said label comprising:

5 a substrate having a first side and a second side, said indicium being located on said first side of said substrate;

a thermally conductive layer located on said first side of said substrate; and

10 a background layer located on said first side of said substrate.

2. The label of claim 1 wherein said indicium is applied to said first side of said substrate.

3. The label of claim 1 wherein said substrate is derived from a portion of a product to which said label is applied.

4. The label of claim 1 wherein said substrate is applied individually to a product.

5. The label of claim 1 wherein said thermally conductive layer is applied individually to a product.

6. The label of claim 1 wherein said background layer is applied individually to a product.

7. The label of claim 1 wherein said indicium is an information-encoding indicium.

8. The label of claim 1 wherein said indicium is a human readable character.

9. The label of claim 1 wherein said indicium is used to provide postage paid information.

10. The label of claim 1 wherein said indicium is used to authenticate the manufacturer of a product.

11. The label of claim 1 wherein said indicium comprises:

a first pattern having a first emissivity value at a given range of wavelengths; and

5 a second pattern having a second emissivity value at said given range of wavelengths, said first and second patterns that combine to form a sequence of differential emissivity values at said given range of wavelengths.

12. The label of claim 1 wherein said indicium is applied on top of said background layer.

13. The label of claim 12 wherein the optical properties of said indicium are substantially similar to the optical properties of said background layer.

14. The label of claim 1 further comprising an adhesive layer superposed on said second side of said substrate.

15. The label of claim 1 wherein said substrate is made from paper.

16. The label of claim 1 wherein said substrate is made from plastic.

17. The label of claim 1 wherein said substrate is made from tyvec.

18. The label of claim 1 wherein said substrate is made from a metallic material.

19. The label of claim 1 wherein said thermally conductive layer is made from a metallic foil.

20. The label of claim 1 wherein said thermally conductive layer is made from a layer of metallic ink.

21. The label of claim 1 wherein said thermally conductive layer is transparent.

22. The label of claim 21 wherein said thermally conductive layer is applied on top of said indicium.

23. A label adapted to receive an indicium having varying spectral emissivity values, said label comprising:

5 a substrate having a first side and a second side; and

a thermally conductive layer located on said first side of said substrate, wherein said indicium is not distinguishable by the naked eye from the remainder of said label.

24. The label of claim 23 wherein the optical properties of said indicium are substantially similar to the optical properties of said substrate.

25. The label of claim 23 wherein the optical properties of said indicium are substantially similar to the optical properties of said thermally conductive layer.

26. A label adapted to receive an indicium having varying spectral emissivity values, said label comprising:

5 a substrate having a first side and a second side; and

a background layer located on said first side of said substrate, wherein the temperature across the surface of said indicium is substantially equal.

27. The label of claim 26 wherein said substrate is made from a material with high thermal conductivity.

28. The label of claim 26 wherein said background layer is made from a material with high thermal conductivity.

29. A label for use with a product that is adapted to receive an indicium having varying spectral emissivity values, said label comprising:

5 a substrate having a first side and a second side, said substrate that is derived from a portion of said product;

a thermally conductive layer that is applied said first side of said substrate; and

10 a background layer that is applied to said first side of said substrate.

30. A method for producing a label that is adapted to receive an indicium having varying spectral emissivity values, said method comprising:

- 5     providing a substrate having a first side and a second side;
- applying a thermally conductive layer to said first side of said substrate; and
- applying a background layer to said first side of said substrate.

31. The method of claim 30 wherein said providing comprises applying said substrate to the surface of a product that is to receive said label.

32. The method of claim 30 wherein said providing comprises using a portion of a product that is to receive said label as said substrate.

33. The method of claim 30 wherein said applying a thermally conductive layer does not occur substantially simultaneously to said applying a background layer.

34. The method of claim 30 wherein said applying a thermally conductive layer occurs substantially simultaneously to said applying a background layer.